

PTO/SB/21 (08-03)

Approved for use through 07/31/2006. OMB 0651-0 031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM***(To be used for all correspondence
after initial filing)*

Application Number	10/799,162
Filing Date	March 12, 2004
First Named Inventor	David G. Winkler
Group Art Unit	1646
Examiner Name	
Attorney Docket No.	60117-39

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement; Form PTO/SB/08 <input checked="" type="checkbox"/> Cited References (19 Attached – 23 Cited) <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts under 37 C.F.R. 1.52 or 1.53 <input type="checkbox"/> Response to Missing Parts/Incomplete Application	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Request for Corrected Filing Receipt <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Declaration <input type="checkbox"/> Statement under 37 CFR 3.73(b) <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> CD(s), Number of CD(s) <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (<i>Appeal Notice, Brief, Reply Brief</i>) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Return Receipt Postcard <input type="checkbox"/> Additional Enclosure(s) (<i>please identify below</i>): _____ _____ _____
---	--	--

Remarks**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Individual Name	Jane E. R. Potter, Registration No. 33,332	22504
Signature		
Date	July 14, 2004	

CERTIFICATE OF FACSIMILE TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date specified below.		
Typed or printed name	Jessica Gaunt	
Signature		Date: July 14, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PATENT

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

July 14, 2004

Date

Jessica Gaunt

Jessica Gaunt

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : David G. Winkler et al.
Application No. : 10/799,162
Filed : March 12, 2004
For : LIGANDS FOR THE TGF-BETA BINDING PROTEINS AND USES
THEREOF

Art Unit : 1646
Docket No. : 60117-39
Date : July 14, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

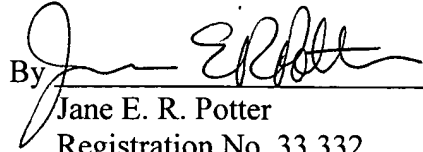
Commissioner for Patents:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicants wish to make known to the Patent and Trademark Office the references set forth on the attached form PTO/SB/08 (copies of the cited references are enclosed). As to any reference supplied, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to traverse or antedate any such reference, as by a showing under 37 C.F.R. § 1.131 or other method. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of which is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

No fee is due at this time in accordance with 37 C.F.R. § 1.97(b).

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,
David G. Winkler et al.
DAVIS WRIGHT TREMAINE LLP

By 
Jane E. R. Potter
Registration No. 33,332

2600 Century Square
1501 Fourth Avenue
Seattle, WA 98101-1688
Phone: (206) 628-7650
Facsimile: (206) 628-7699

**Complete if Known**

(Use as many sheets as necessary)

Sheet	1	of	3
-------	---	----	---

Application Number	10/799,162
Filing Date	March 12, 2004
First Named Inventor	David G. Winkler
Art Unit	1646
Examiner Name	
Attorney Docket Number	60117-39

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds of USPTO Patent Documents at www.uspto.gov or MPEP 901.04 ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/88B (05-03)

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
		Application Number	10/799,162		
		Filing Date	March 12, 2004		
		First Named Inventor	David G. Winkler		
		Art Unit	1646		
		Examiner Name			
Sheet	2	of	3	Attorney Docket Number	60117-39

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BALEMANS ET AL., <i>Extracellular Regulation of BMP Signaling in Vertebrates: A Cocktail of Modulators</i> , DEVELOPMENTAL BIOLOGY 250:231-250, 2002.	
		BONDESTAM, <i>Ligands & Signaling Components of the Transforming Growth Factor β Family</i> , HELSINKI UNIVERSITY BIOMEDICAL DISSERTATIONS NO. 17, 2002.	
		EBARA ET AL., <i>Mechanism for the Action of Bone Morphogenetic Proteins and Regulation of Their Activity</i> , SPINE, 27(165):S10-S15, 2002.	
		GROPPE ET AL., <i>Structural Basis of BMP Signalling Inhibition by the Cystine Knot Protein Noggin</i> , NATURE, 420:636-642, 2002.	
		KOLI ET AL., <i>Latency, Activation, and Binding Proteins of TGF-β</i> , MICROSCOPY RESEARCH AND TECHNIQUE, 52:354-362, 2001.	
		VON BUBNOFF ET AL., <i>Intracellular BMP Signaling Regulation in Vertebrates: Pathway or Network?</i> , DEVELOPMENTAL BIOLOGY, 239:1-14, 2001.	
		OELGESCHLAGER ET AL., <i>The Evolutionarily Conserved BMP-Binding Protein Twisted Gastrulation Promotes BMP Signaling</i> , NATURE 105:757-763, 2000.	
		REDDI, <i>Interplay Between Bone Morphogenetic Proteins and Cognate Binding Proteins in Bone Cartilage Development: Noggin, Chordin and DAN</i> , ARTHRITIS RESEARCH, 3(1):1-5.	
		KHALIL, <i>TGF-β: From Latent to Active</i> , MICROBES AND INFECTION, 1255-1263, 1999.	
		LIAN ET AL., <i>Bone Formation: Osteoblast Lineage Cells, Growth Factors, Matrix Proteins, and the Mineralization Process</i> , PRIMER ON THE METABOLIC BONE DISEASES AND DISORDERS OF MINERAL METABOLISM, 4TH EDITION, 14-29, 1999.	
		PITTENGER ET AL., <i>Multilineage Potential of Adult Human Mesenchymal Stem Cells</i> , SCIENCE, 284:143-147, 1999.	
		SCHMITT ET AL., <i>Bone Morphogenetic Proteins: An Update on Basic Biology and Clinical Relevance</i> , JOURNAL OF ORTHOPAEDIC RESEARCH, 17:269-278, 1999.	
		SMITH, <i>TGF β Inhibitors New and Unexpected Requirements in Vertebrate Development</i> , TIG, 15(1):3-5, 1999.	
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/08B (05-03)
Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
		Application Number	10/799,162		
		Filing Date	March 12, 2004		
		First Named Inventor	David G. Winkler		
		Art Unit	1646		
		Examiner Name			
Sheet	3	of	3	Attorney Docket Number	60117-39

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		HSU ET AL., <i>The Xenopus Dorsalizing Factor Gremlin Identifies a Novel Family of Secreted Proteins that Antagonize BMP Activities</i> , MOLECULAR CELL, 1:673-683, 1998.	
		IEMURA ET AL., <i>Direct Binding of Follistatin to a Complex of Bone-Morphogenetic Protein and its Receptor Inhibits Ventral and Epidermal Cell Fates in Early Xenopus Embryo</i> , PROC. NATL. ACAD. SCI. USA, 95:9337-9342, 1998.	
		DURHAM ET AL., <i>Alterations in Insulin-Like Growth Factor (IGF)-Dependent IGF-Binding Protein-4 Proteolysis in Transformed Osteoblastic Cells</i> , ENDOCRINOLOGY, 136(4):1374-1380, 1995.	
		MIYAZONO ET AL., <i>Transforming Growth Factor-β: Latent Forms, Binding Proteins and Receptors</i> , GROWTH FACTORS, 8:11-22, 1993.	
		POCKWINSE ET AL., <i>Expression of Cell Growth and Bone Specific Genes at Single Cell Resolution During Development of Bone Tissue-Like Organization in Primary Osteoblast Cultures</i> , JOURNAL OF CELLULAR BIOCHEMISTRY, 49:310-323, 1992.	
		RIGGS, <i>Overview of Osteoporosis</i> , THE WESTERN JOURNAL OF MEDICINE, 154:63-77, 1991.	
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.